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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicants: Kevin J. Gaughan, *et al.*	I hereby certify that this paper is being deposited with the United States Postal Service as first class mail, postage pre-paid, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date:
Serial No.: 09/551,110	
Filed: April 18, 2001	
For: **VIDEO AND AUDIO FUNCTIONS IN A WEB TELEVISION**	
Group Art Unit: 2611	January 19, 2005 (Date)
Examiner: M. Demicco	
Attorney Docket No.: 7159	Trevor B. Joike Reg. No. 25,542 Attorney for Appellants
Confirmation No.: 2550	

APPELLANT'S BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR §1.192, Appellants submit the following brief.

1. Real Party in Interest

The real party in interest is Zenith Electronics Corporation of Lincolnshire, IL.

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2. Related Appeals and Interferences

There are no other appeals and interferences known to Appellants, Appellants' legal representatives or assignees which will directly affect or be affected by or have a bearing on the Board's decision in the pending appeal.

3. Status of Claims

Claims 44-47 and 54-65 are finally rejected. Claims 48-53 are pending and allowed.

4. Status of Amendments

The amendment submitted after following rejection has not been entered. All other amendments have been entered.

5. Summary of the Invention

A web television 10 includes a display 12 and a communication medium 22 that permits the web television 10 to communicate with on-line content providers such as by way of the Internet. The web television 10 also includes a television control system 30 that controls operation of the web television 10.

The television control system 30 of the web television 10 includes a television controller 32 (such as may be a microprocessor with memory) and an Internet module 34 along with an audio/video switch 36, a PIP module 38, a video processor 40, an audio processor 42, a raster control 44, a communication bus 46, and a tuner 48. The Internet module 34 has a port connecting the Internet module 34 to the communication medium 22 so that

the Internet module 34 may transmit and receive information to and from remote on-line devices.

The television controller 32 communications over a communication bus 46 with the Internet module 34, as well as with the audio/video switch 36, the PIP module 38, the video processor 40, the audio processor 42, the raster control 44, and the tuner 48. The television controller 32 controls the audio/video switch 36 to supply either Internet communications from the Internet module 34 or television signals from the tuner 48 to the PIP module 38, to the video processor 40, and to the audio processor 42.

The communication bus 46 supports two-way communication between the Internet module 34 and the television controller 32. Examples of messages which may be used during such communication are shown in Figures 3-9 as messages 60, 70, 80, 90, 100, 110, and 120.

The television controller 32 initiates each communication between itself and the Internet module 34 by transmitting a start signal followed by an appropriate slave address. The slave address (i) specifies the address of a module (such as the Internet module 34), and (ii) designates whether the television controller 32 is writing to the communication bus 46 (i.e., transmitting) or reading from the communication bus 46 (i.e., receiving).

A write slave address having a particular value, such as $44, is transmitted by the television controller 32 when the television controller 32 writes a message to the communication bus 46 and the message is intended for the Internet module 34. A read slave address having a particular value, such as $45, is

transmitted by the television controller 32 when the television controller 32 determines to read information on the communication bus 46 from the Internet module 34. After the television controller 32 transmits a start signal followed by a slave address, the television controller 32 waits for an acknowledgement (ACK).

The messages most pertinent to the present invention are the messages 100 and 120. The television controller 32 transmits the message 100 in order to convey to the Internet module 34 the revision and version numbers of the television controller 32. The message 100 includes the start signal and the write slave address described above. Following acknowledgement of the write slave address byte by the Internet module 34, the television controller 32 transmits a version command byte in the message 100. The version command byte of the message 100 (containing a value of $03, for example) indicates that the message 100 contains the revision and version numbers of the television controller 32. The revision and version numbers of the television controller 32 may be useful to the Internet module 34 in determining which of its features are compatible with the software executed by the television controller 32 and, therefore, should be initialized.

The message 120 is transmitted so that the Internet module 34 may respond to the message 60 having its request byte set to request version and revision numbers from the internet module 34. The message 120 includes the start signal and the read slave address of the message 110. Following transmission of the start signal and the read slave address, the television controller 32 waits for an acknowledgement followed by a

byte having a value (such as $03) indicating that version identification information from the internet module 34 follows. Following receipt of this version identification indicating byte, the television controller 32 transmits, to the internet module 34, an acknowledgement that it has received the version identification indicating byte. Upon receipt of this acknowledgement, the Internet module 34 transmits a software revision number byte. Following receipt of the software revision number byte, the television controller 32 transmits an acknowledgement and then waits for a software version byte. Upon receipt of this acknowledgement, the internet module 34 transmits the software version number byte. Following receipt of the software version number byte, the television controller 32 transmits an acknowledgement and then waits for a checksum byte.

6. Issue Appealed

Whether independent claims 44 and 60 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,940,074 (hereinafter, "the Britt '074 patent") in view of U.S. Patent No. 5,991,308 (hereinafter, "the Fuhrmann '308 patent").

7. Grouping of Claims

For purposes of this appeal, dependent claims 45-47 and 54-59 may be grouped with independent claim 44, and dependent claims 61-65 may be grouped with independent claim 60.

8. Argument

The Britt '074 Patent

Figure 1 of the Britt '074 patent shows a network having web television clients 1 coupled through a modem pool 2 to remote servers 4 via the Internet 3. The network includes a server 5 that provides web television services to the web television clients 1. Each of the web television clients 1 can connect remotely to the server 5 either through a direct telephone or ISDN connection or through the Internet 3 via the modem pool 2. The server 5 is illustrated in Figure 2 of the Britt '074 patent.

Figure 3 of the Britt '074 patent illustrates a representative one of the web television clients 1. The illustrated web television client 1 includes web television comprising a set top box 10 and a television set 12. The set top box 10 may be a separate unit or may be built into the television set 12 as an integral unit. The set top box 10 includes hardware and software for providing the user with a graphical user interface by which a user can gain access to the network so that the user can browse the Web, send e-mail, and otherwise access the Internet.

The web television client 1 uses the television set 12 as a video and audio display. The set top box 10 is coupled locally to the television set 12 by a link 6. The link 6 delivers audio and video to the television set 12. A remote control 11 is operated by the user in order to control the web television client 1 to browse the Web, send e-mail, and perform other Internet-related functions.

The set top box 10, as shown in Figure 5, includes application software 31 that operates in conjunction with operating system (OS) software 32. The operating system software 32 includes various device drivers and otherwise provides an interface between the application software 31 and the system hardware components 40. The hardware components 40 are illustrated in Figure 4.

The server 5 transmits instructions to the web television client 1 in response to a message transmitted to the server 5 by the web television client 1. As the web television client 1 receives the instructions, the web television client 1 either stores the instructions for later execution or executes the instructions as they arrive.

Browser software in the set top box 10 of the web television can be upgraded or reconfigured by downloading replacement software or data to the set top box 10 from the server 5 via the Internet 3 or via remote direct phone connection. In addition, the set top box 10 can store various resources downloaded from the Web, such as Java applets (programs).

Replacement software or data is downloaded to correct an error in the program instructions or data. The web television client 1 determines whether a download should take place each time the web television client 1 is reset. A download is performed if, upon reset, the web television client 1 detects an error or, in the case of an upgrade, the web television client 1 finds a download request in memory.

The reset routine of Figure 6 is performed any time the web television client 1 is reset during

operation or any time the set top box 10 is turned on. Accordingly, if all program instructions and data are valid, a normal start up is performed. On the other hand, if all program instructions and data are not valid (i.e., they contain an error), an error download routine is performed. In the error download routine, some or all of the corrupt information is replaced by correct information downloaded from the Internet 3.

Figure 7 illustrates a routine by which an upgrade of the Web browser in the set top box 10 is initiated. During a normal start-up (i.e., when no error is detected upon reset), the web television client 1 automatically connects to the server 5. If an upgrade is available from the server 5, and if the upgrade is mandatory, the server 5 sends a command to the web television client 1 to cause a download request to be written into its memory. If the upgrade is not mandatory, the web television client 1 prompts the user to either accept or decline the upgrade. The web television client 1 is then commanded by the server 5 to reset according to the routine of Figure 6.

Figure 8 illustrates a portion of the normal start-up routine for initiating an upgrade. If a download request is not present in memory, the browser program is started normally. If a download request is present in memory, communication is established with the server 5, and the server 5 initiates downloading of the upgrade. If a default server is required for the upgrade download, the web television client 1 indicates to the default server which version of software it is currently running so that the default server can determine the

proper default file to download to the web television client 1. The default upgrade is then downloaded.

In the case where an error is detected at the web television client 1, the web television client 1 requests the default upgrade from the default server. The web television client 1 indicates to the default server which version of software it is currently running, so that the default server can determine the proper default upgrade to download to the web television client 1. The requested upgrade is then downloaded.

The Fuhrmann '308 Patent

The Fuhrmann '308 patent discloses in Figure 10 a cable television system having a central unit 252 coupled via a communication link 251 to a plurality of subscribers including subscribers 254 and 256. The central unit 252 sends and receives digital information bi-directionally with each subscriber. Each subscriber has a remote unit RU which acts as the interface between the subscriber's television, computer, telephone and other devices and the communication link 251.

The central unit 252 has a modem that assembles frames of data from a TDMA digital data input stream, and encodes and transmits these frames to the remote units RU using orthogonal codes. The modem also includes a receive channel which receives encoded frames, decodes the data in the received frames using the transpose of the code matrix of the orthogonal codes used by the remote units RU to transmit the received frames, reassembles the TDMA digital data stream from the decoded data, and outputs the TDMA stream for use by other equipment providing various services to the subscribers.

The Examiner cited column 95, lines 11-22 of the Fuhrmann '308 patent in particular. This portion of the Fuhrmann '308 patent discloses that, when the communication link 251 between the subscriber remote unit RU and the central unit 252 is active, the subscriber remote unit RU can begin receiving messages after receiving a hello message from the central unit 252. The hello message gives the subscriber remote unit RU the software revision number and the superframe offset number of the central unit 252. The revision number allows the subscriber remote unit RU to check its software revision number for compatibility, and the superframe offset number is set into a SFDOR register in the receiver time base of the subscriber remote unit RU for use in correctly reproducing an external time division multiplex stream superframe signal at the appropriate spot in the data stream so that external devices that depend upon the superframe signal can correctly interpret the TDM data.

ISSUE

Independent claim 44 is directed to a web television comprising a display, a tuner, an internet module, and a television controller. The tuner selects television video for display on the display. The internet module supplies internet video for display on the display, the internet video is derived from internet communications between the web television and internet content providers, and the internet module is programmed to execute a first software code. The television controller is coupled locally to the internet module, the television controller is separate from the internet module, and the television controller is computer based.

The television controller communicates with the internet module using a message format, the television controller is programmed to execute a second software code, and the television controller processes a message between the television controller and the internet module indicating identification of one of the first and second software codes.

Examiner's Application of the Britt '074 Patent - It is somewhat difficult to fully understand the Examiner's application of the Britt '074 patent to independent claim 44 because the Examiner does not use reference numerals from the Britt '074 patent. However, as appellants understand the rejection, (i) the television set 12 of the web television client 1 is the display and tuner of independent claim 44, (ii) the set top box 10 of the web television client 1 is the Internet module of independent claim 44 (see page 3 of the Final Rejection in which the Examiner refers to column 6, lines 26 and 27 of the Britt '074 patent for a description of the execution of first software code by the Internet module), and (iii) the server 5 is the television controller of independent claim 44 (see page 4 of the Office Action, lines 3 and 4 in which the Examiner states that the server computer executes second software code).

Local Coupling - However, this characterization of the Britt '074 patent (even when combined with the Fuhrmann '308 patent) does not result in an arrangement that meets the limitations of independent claim 44. Specifically, independent claim 44 recites that the television controller is coupled locally to the internet module. The server 5 (the television controller according to the Examiner) as disclosed in the Britt '074

patent is not coupled locally to the set top box 10 (the Internet module according to the Examiner). Instead, the server 5 is coupled by a phone line or an Integrated Services Digital Network (ISDN) to the set top box 10. Such a connection is, by definition, a remote coupling rather than a local coupling.

Web Television - Moreover, while the Britt '074 patent discloses a web television in Figure 3, the Britt '074 patent does not disclose a web television as recited in independent claim 44. This web television disclosed in the Britt '074 patent comprises the television set 12 and the set top box 10. The problem that the Examiner faces is that there is no disclosure in the Britt '074 patent that this web television also has a television controller as defined in independent claim 44.

That is, as recited in independent claim 44, the television controller of the web television is computer based, communicates with the internet module using a message format, executes a second software code, and processes a message between itself and the internet module indicating identification of one of the first and second software codes.

Therefore, the Examiner stretches the Britt '074 patent by pointing to an element, i.e., the server 5, that is not part of the web television. Indeed, one of ordinary skill in the art considers a web television to be traditionally defined as a television that consists of a set top box connected to a television, a keyboard, and a telephone line and that provides Internet access (usually Web access and e-mail) in a format that can be viewed on a standard television set rather than on the customer's computer. This traditional definition of a

web television describes only the television set 12 and the set top box 10 disclosed in the Britt '074 patent.

Accordingly, one of ordinary skill in the art would not understand that a web television also includes a server that is accessible by way of a telephone line.

Broadest Reasonable Interpretation - During examination, an Examiner is entitled to give claims their broadest reasonable interpretation consistent with the specification and consistent with the interpretation that those skilled in the art would reach. Accordingly, there are two limitations on how broadly an Examiner can interpret a claim, the specification and the understanding of those skilled in the art.

As discussed above, a person skilled in the art understands that a web television is a television that consists of a set top box connected to a television, a keyboard, and a telephone line and that provides Internet access (usually Web access and e-mail) in a format that can be viewed on a standard television set rather than on the customer's computer. This understanding is consistent with the specification of the present application.

Therefore, because the Britt '074 patent does not disclose a local coupling between a television controller and an Internet module of a web television, and because a person skilled in the art would not understand the Britt '074 patent to disclose a web television that includes the television controller recited in independent claim 44, the Examiner's application of the Britt '074 patent to independent claim 44 is incorrect.

Similarly, the Fuhrmann '308 patent does not disclose or suggest either local coupling between a television controller and an Internet module of a web television, or a web television that includes the television controller recited in independent claim 44.

Accordingly, a combination of the Britt '074 patent and the Fuhrmann '308 patent does not disclose or suggest the invention of independent claim 44.

Consequently, independent claim 44 is not unpatentable over the Britt '074 patent in view of the Fuhrmann '308 patent.

Independent claim 60 is directed to a web television comprising a display, a tuner, a television controller, and an internet module. The tuner select television videos for display on the display. The internet module couples the television controller to the internet, the internet module supplies internet video for display on the display, and the internet video is derived from internet communications between the web television and internet content providers. The television controller and the internet module are arranged to communicate messages with one another, and one of the messages contains software identification information.

Web Television - As discussed above, the Britt '074 patent discloses a web television in Figure 3. However, the Britt '074 patent does not disclose a web television as recited in independent claim 44.

More specifically, the web television disclosed in the Britt '074 patent comprises the television set 12 and the set top box 10. There is no disclosure in the Britt '074 patent that this web television also has a television controller as defined in independent claim 44.

(As recited in independent claim 44, the television controller communicates messages with the internet module, where one of the messages contains software identification information.)

Therefore, the Examiner stretches the Britt '074 patent by pointing to an element, i.e., the server 5, that is not part of the web television. Indeed, one of ordinary skill in the art considers a web television to be traditionally defined as a television that consists of a set top box connected to a television, a keyboard, and a telephone line and that provides Internet access (usually Web access and e-mail) in a format that can be viewed on a standard television set rather than on the customer's computer. This traditional definition of a web television describes the television set 12 and the set top box 10 disclosed in the Britt '074 patent.

Accordingly, one of ordinary skill in the art would not understand that a web television also includes a server that is accessible by way of a telephone line.

Therefore, because a person skilled in the art would not understand the Britt '074 patent to disclose a web television that includes the television controller recited in independent claim 60, the Examiner's application of the Britt '074 patent to independent claim 60 is incorrect.

Similarly, the Fuhrmann '308 patent does not disclose or suggest a web television that includes the television controller recited in independent claim 44.

Accordingly, a combination of the Britt '074 patent and the Fuhrmann '308 patent does not disclose or suggest the invention of independent claim 60.

Consequently, independent claim 60 is not unpatentable over the Britt '074 patent in view of the Fuhrmann '308 patent.

9. Conclusion

For the foregoing reasons, reversal of the Final Rejection is respectfully requested.

10. Appendix

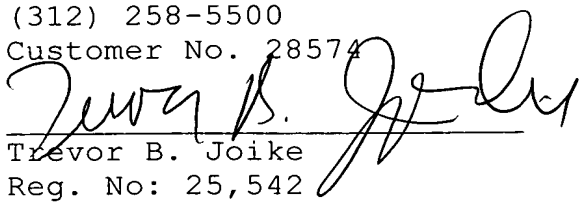
The Appendix containing a copy of the claims involved in this appeal is attached hereto.

This brief is being filed in triplicate as required by 37 C.F.R. §1.192.

The Commissioner is hereby authorized to charge Account No. 26 0175 for $500.00 (fee set forth in 37 C.F.R. §1.17(c)) and any additional fees which may be required, or to credit any overpayment to Account No. 26 0175.

Respectfully submitted,

Schiff Hardin LLP
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606
(312) 258-5500
Customer No. 28574

By: 

Trevor B. Joike
Reg. No: 25,542

January 19, 2005

APPENDIX

44. A web television comprising:

a display;

a tuner, wherein the tuner is arranged to select television video for display on the display;

an internet module, wherein the internet module is arranged to supply internet video for display on the display, wherein the internet video is derived from internet communications between the web television and internet content providers, and wherein the internet module is programmed to execute a first software code; and

a television controller being coupled locally to the internet module, being separate from the internet module, and being computer based, wherein the television controller is arranged to communicate with the internet module using a message format, wherein the television controller is programmed to execute a second software code, and wherein the television controller is arranged to process a message between the television controller and the internet module indicating identification of one of the first and second software codes.

45. The web television of claim 44, wherein the identification comprises a version number of the one of the first and second software code.

46. The web television of claim 44, wherein the identification comprises a revision number of the one of the first and second software code.

47. The web television of claim 46, wherein the identification comprises a version number of the one of the first and second software code.

54. The web television of claim 44, wherein the identification identifies the first software code, and wherein the television controller is arranged to receive the identification from the internet module.

55. The web television of claim 54, wherein the identification comprises a version number of the first software code.

56. The web television of claim 54, wherein the identification comprises a revision number of the first software code.

57. The web television of claim 56, wherein the identification comprises a version number of the first software code.

58. The web television of claim 44, wherein the television controller is further arranged to send a signal to the internet module, wherein the signal indicates that the television controller is going to send the message to the internet module, wherein the internet module is arranged to respond to the signal by acknowledging receipt of the signal, and wherein the television controller is arranged to send the message to the Internet module in response to the acknowledgment.

59. The web television of claim 44, wherein the internet module is arranged to transmit a request to the television controller, wherein the request comprises a request for the identification, and wherein the identification identifies the second software code.

60. A web television comprising:

a display;

a tuner, wherein the tuner is arranged to select television video for display on the display;

a television controller; and,

an internet module, wherein the internet module is arranged to couple the television controller to the internet, wherein the internet module is arranged to supply internet video for display on the display, wherein the internet video is derived from internet communications between the web television and internet content providers, wherein the television controller and the internet module are arranged to communicate messages with one another, and wherein one of the messages contains software identification information.

61. The web television of claim 60, wherein the software identification information includes a software version number.

62. The web television of claim 60, wherein the software identification information includes a software revision number.

63. The web television of claim 62, wherein the software identification information includes a software version number.

64. The web television of claim 44, wherein the television controller comprises a microprocessor.

65. The web television of claim 44, wherein the television controller controls a raster controller.